

Clay County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/22/2017

Using the most recent IMPLAN data available (2015) adjusted for 2017, 15 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Clay County economy.¹

These 15 sectors have a total direct output of approximately **\$197.3 million** and support **694.3 jobs** in Clay County. Running the model for all 15 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Clay County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	694.3	11.54%	\$42,350,393	14.85%	\$197,279,750	69.17%
Indirect Effect	217.0	3.61%	\$14,886,364	5.22%	\$31,582,984	11.07%
Induced Effect	151.0	2.51%	\$8,184,408	2.87%	\$15,483,291	5.43%
Total Effect	1062.3	17.65%	\$65,421,165	22.94%	\$244,346,024	85.67%

As shown in the above table, agriculture, food, and food processing sectors support **1,062.3 jobs**, or **17.65%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$244.3 million**, **roughly 85.67% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 15 agriculture, food, and food processing sectors is approximately **\$65.4 million**, or **22.94% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **22.94% of the total economy**.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **287.8 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Clay County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	287.8	\$34,737,684
Grain farming	112.9	\$40,830,140
Wholesale trade	73.4	\$13,795,839
All other crop farming	64.1	\$4,789,956
Animal production, except cattle and poultry and eggs	47.4	\$5,849,934
Farm machinery and equipment manufacturing	39.6	\$20,212,408
Other animal food manufacturing	35.3	\$48,123,952
Bread and bakery product, except frozen, manufacturing	32.0	\$4,091,381
Oilseed farming	28.9	\$32,290,787
Truck transportation	27.0	\$4,732,843

The other animal food manufacturing sector directly contributes approximately **\$48.1 million** to the Clay County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Other animal food manufacturing	35.3	\$48,123,952
Grain farming	112.9	\$40,830,140
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	287.8	\$34,737,684
Oilseed farming	28.9	\$32,290,787
Farm machinery and equipment manufacturing	39.6	\$20,212,408
Wholesale trade	73.4	\$13,795,839
Animal production, except cattle and poultry and eggs	47.4	\$5,849,934
All other crop farming	64.1	\$4,789,956
Truck transportation	27.0	\$4,732,843
Bread and bakery product, except frozen, manufacturing	32.0	\$4,091,381

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Clay County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	28.9	\$32,290,786.74
Grain farming	112.9	\$40,830,139.16
Vegetable and melon farming	0.8	\$141,087.90
Greenhouse, nursery, and floriculture production	3.8	\$420,437.72
All other crop farming	64.1	\$4,789,956.09
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	287.8	\$34,737,682.34
Dairy cattle and milk production	9.1	\$2,748,707.77
Poultry and egg production	1.3	\$902,701.56
Animal production, except cattle and poultry and eggs	47.4	\$5,849,934.10
Other animal food manufacturing	35.3	\$48,123,950.96
Bread and bakery product, except frozen, manufacturing	32.0	\$4,091,380.60
Frozen cakes and other pastries manufacturing	0.4	\$65,692.98
Farm machinery and equipment manufacturing	39.6	\$20,212,408.07
Veterinary services	21.5	\$1,745,369.08
Landscape and horticultural services	9.2	\$329,511.37

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Clay County, the retail sector was omitted.